120V/208V

APC
Legendary Reliability™

Server and Network Power Solutions

Smart-UPS®

Performance power protection
for servers and networks

Reliability

Line-interactive design

Sine wave output -premium, safe power

Network-grade line conditioning

Site-wiring fault indicator

Auto self-test

Interface communications port

Lightning/surge protection

ASIC's technology

Availability

SmartBoost™ brownout protection

SmartTrim™ overvoltage protection

CellGuard™ intelligent battery management

Battery replacement warning

Quick Swap™ hot-swappable batteries

Redundant Switch for mirrored UPS power protection

ProtectNet™ for network surge protection

SmartSlot™ Accessories

Manageability

PowerChute® *plus* software included

Software configurable features

Built-in SmartSlot for accessory cards

SNMP ready for servers with Power Net SNMP Agent

Load, power and voltage meters

Audible alarms

Personalized 7 x 24 Web support through APC Interactive Assistant

Warranty & Approvals

2 year warranty

$25,000 lifetime equipment protection

UL listed, CSA certified

FCC Class B compliance

Novell labs approved

Global Service Programs

Quick Start Plan - for highest level of fail-safe power management

Start-up Service

On-site support service

Power plan extended warranty

See specification tables for model details.

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New for 2000

Windows® 2000 Ready

Designed for Microsoft® Windows®2000 Professional Windows NT® Workstation 4.0 Windows® 98

APC Smart-UPS provides the best "out-of-box" integration for "built-in" UPS shutdown in Microsoft Windows 2000. The co-development of Windows native UPS shutdown reiterates APC and Microsoft's commitment to reliability in today's enterprise computing environments. APC continues to deliver innovative and convenient UPS management solutions to improve customers' productivity.

2U Smart-UPS Rack-mount Solutions

APC Smart-UPS Rack-mount 700, 1000, and 1400 provide longer runtime on battery, a faster and easier replacement battery chassis tray, improved voltage regulation, and enhanced intelligent battery management, all in a smaller 2U (3.5") form factor. *Page 10-11*

Smart-UPS 5000

Introducing the first dual slot-equipped, 5kVA UPS offered with APC's Web/SNMP Management Card (AP9606) pre-installed. The SU5000RM5U has a form factor less than 50% of similar 5kVA rack-mount systems. *Page 8,10*

Redundant Switch

This Smart-UPS accessory offers 7x24 AC power and continuous availability of safe server shutdown via a mirrored configuration. *Page 18-19*

Web/SNMP Management Card

UPS network interface card for network administrators that provides standards-based management of UPSs in racks, computer rooms, and datacenter environments. *Page 17*

PowerChute Web Device Manager

PowerChute® Web Device Manager™ allows UPS monitoring utilizing a web browser. *Page 6-7*

APC 120V Step-down Transformer

AP9621 can be used with the Smart-UPS 5000, or any Smart-UPS 208V, Matrix™ or Symmetra®PowerArray™ product to step the voltage down from 208 VAC to 120 VAC. This solution allows you to power the data center or rack enclosure from one high-powered circuit providing UPS protected 120 VAC power to each piece of equipment. *Page 10*

Complete Power Protection

Reliability—Availability—Manageability: three essential requirements when choosing power protection for your systems.

Reliability—The UPS design consistently delivers dependable performance through a combination of form, function, and features. Your hardware is protected and your system life extended through features such as full-time multi-stage surge suppression and noise filtering, network-grade line conditioning, proactive notification of the unit's health, and automatic shutdown during extended outages.

Availability—The UPS provides reliable power minimizing downtime. Availability increases when: the unit can operate through a greater range of input voltage; the batteries are easily accessible and user-serviceable providing zero downtime; and the unit provides information to automatically take necessary actions to keep systems available. Availability is increased and downtime decreased by adding accessories which enhance network performance by: rebooting hung devices; initiating shutdowns in abnormal environmental conditions; and providing notification of such actions.

Manageability—The UPS's control and status are available both in-band and out-of-band, allowing as much or as little control as desired. The degree of Manageability is directly related to users' customized parameters and notifications, through hardware and software features. Manageability is critical to the overall performance of the network and attached equipment.

Requiring **Reliability**, **Availability** and **Manageability** ensures that your power protection solution is dependable, accessible and flexible, minimizing downtime, saving time and money, and increasing overall customer satisfaction.

Reliability

Line-interactive design delivers unmatched performance and reliability

Innovative line-interactive design uses the DC to AC power inverter "in reverse," like a battery charger, during normal operation providing greater performance and efficiency.

Sine-wave output

APC Smart-UPS sine-wave output provides assurance of compatibility with all loads.
(Does not apply to SU420NET/SU620NET models)

Network-grade line conditioning prevents glitches

Full time EMI/RFI filters prevent line noise from causing data errors. Smart-UPS meets Novell and Microsoft's approval for network protection, without the need for additional external conditioners.

Site wiring fault indicator saves you trouble and expense

Alerts you to potential problems, such as missing ground and reversed polarity, two common miswirings which usually require an electrician's visit to diagnose (120VAC models only).

Lightning and surge protection shields hardware

When measured via ANSI/IEEE 587 Category "A" and "B" tests, the suppression performance of the APC Smart-UPS is superior to virtually all separate surge suppressors.

Pre-failure diagnostics

Smart-UPS continuously monitors its health and proactively informs you of the results via Web, SNMP, E-mail or paging.

Auto self-test

All APC Smart-UPS initiate a self-test at power-on and every 2 weeks, at the push of a button, or pre-determined times using software. This ensures that you will be alerted to degraded batteries before they wear out.

Graceful, unattended shutdown

In the event of an extended power outage, an APC Smart-UPS will interface with PowerChute *plus* via the serial port to perform automatic safe shutdown of the attached system. Power failures can occur at night, on weekends, or while the system administrator is out of the building, which makes automatic safe shutdown critical. Smart-UPS provides extensive unattended safe shutdown of many operating systems when the UPS runs out of battery power, including Microsoft Windows 95/98, Windows NT/2000, Novell NetWare, SCO Unix, Red Hat, SuSE, Caldera, and TurboLinux (other OSs available separately). By using PowerChute *plus* software you can manage and diagnose power problems.

- **Safely shut down a single server via serial cable**
  The Smart-UPS communications port provides the coordination of a safe shutdown with most popular operating systems by Microsoft, Novell, HP, IBM, Sun, SCO, Linux, and others.
- **Safely shut down multiple servers via serial cable**
  APC has several solutions to shut down multiple servers. The 2-Port Interface Expander Card (AP9607) provides two additional ports. The 8-Port Interface Expander (AP9207) provides a total of eight ports and can be daisy-chained to provide 15 ports. Both accessories facilitate graceful system shutdown via dependable hardwire connections and allow advanced UPS management. The units are ideal for "server farms" or multiple operating system environments.
- **Safely shut down multiple servers via network connection**
  APC PowerChute network shutdown software communicates across the network with Smart-UPS equipped with APC Web/SNMP card to provide reliable, graceful unattended shutdown of multiple computer systems over the network.

Availability

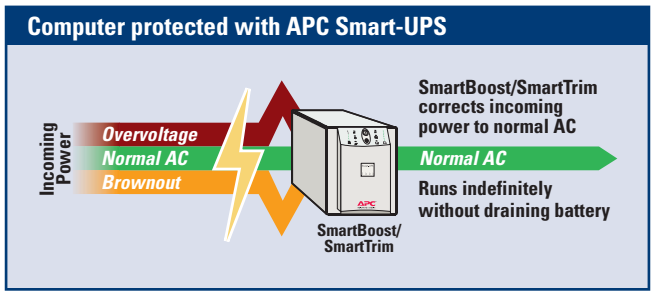
Automatic Voltage Regulation

SmartBoost™ automatically corrects brownout conditions

Allows you to work through brownouts without unnecessary battery drain. SmartBoost automatically steps up low voltage to safe output levels.

SmartTrim™ automatically corrects overvoltage conditions

Allows you to work through overvoltages without unnecessary battery drain. SmartTrim automatically steps down high voltage to safe output levels.



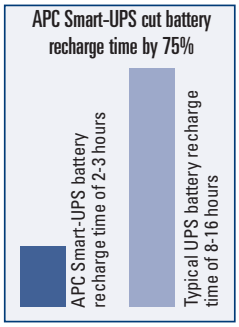
Intelligent Battery Management

CellGuard means longer battery life

Improved reliability results from a precision battery charging system, and automatic true-load battery tests. Redundant overcharge protection contributes to longer battery life. SmartBoost™ and SmartTrim™ regulate under- and overvoltages without switching to battery.

Battery Replacement Warning prevents downtime

APC Smart-UPS automatically performs a self-test every two weeks. This ensures you will be alerted to degraded batteries before they wear out. Through software, or the push of a button, you may perform self-tests anytime.


APC Smart-UPS cut battery recharge time by 75%
APC Smart-UPS battery recharge time of 2-3 hours
Typical UPS battery recharge time of 8-16 hours

Faster Recharge Time

APC Smart-UPS battery charging system is microprocessor controlled to precisely charge batteries in less time than legacy UPS systems. This makes your system available more quickly for subsequent power disturbances.

QuickSwap™

The 60 second, user friendly, hot-swappable battery replacement system

Saves the time and expense of returning the UPS to the factory for battery service, and allows safe and easy replacement of batteries while your system is up and running. Replacement battery kits ship in a reusable box for convenient return of exhausted batteries to a recycling center or to APC.

Prevent Downtime

Predict failures

By periodically conducting self-tests and other diagnostics, Smart-UPS can warn you of failures before they happen. For example, Smart-UPS will proactively notify you 6-8 weeks in advance of a battery replacement.

Deliver diagnostic data

Smart-UPS constantly monitors its health and delivers the results via Web, SNMP, E-mail, or paging.

Take Action

The built-in SmartSlot bay gives Smart-UPS the ability to take the necessary actions to reboot "hung" devices, giving you availability when you need it most.

- Reboot hung servers and networking equipment remotely using modem (out-of-band) using the Out-of-Band Management card (AP9608)
- Reboot hung servers via Web, SNMP, or Telnet (in band) using the Web/SNMP Management card (AP9606 or AP9603)
- Reboot hung servers and networking equipment in and out-of-band using the MasterSwitch Plus (AP9255 or AP9225EXP)

Accessories Increase Availability

By adding APC accessory cards into the built-in SmartSlot™, you can monitor power conditions and take action. The addition of the accessory cards increases overall system availability by proactively notifying you of conditions that could affect uptime. *(Accessories sold separately and detailed on p. 17)*

Redundant Switch

Redundant Switch continuously monitors two AC circuits and automatically switches from the primary to the redundant power source, increasing overall system availability. *(See p. 18 for more information)*

ProtectNet™ increases availability

ProtectNet increases the availability of your systems by protecting your wiring and cabling from "back-door" surges and spikes, which cause system downtime and equipment damage.*(For more information, visit* www.apcc.com/products/protectnet*)*

ProtectNet features a unique Double-Up! Supplemental Equipment Policy

Under this unique policy, the total recovery limits of a Smart-UPS' product's lifetime equipment protection policy is doubled. APC will then repair or replace properly connected and protected equipment in the unlikely event that it is damaged by a lightning strike or surge, up to $50,000. (US and Canada only). For program details please refer to *www.apcc.com.*

Manageability

Informative LED Display provides status at a glance

Instantly assess the status of your power and the APC Smart-UPS without even pushing a button. Bar meters and status indicators are simple to use and easy to understand. Visible and audible alarms alert you to fault conditions.

Load, Power and Volt Meters keep you in control

The Load Meter* prevents you from exceeding UPS capacity. The Volt Meter* reports utility line voltage and battery capacity, allowing you to gauge how much time you have before batteries are depleted. An alarm sounds when batteries are low, allowing you time to save data and shutdown the system.

**These features are not available on the SU420 NET/620NET models.*

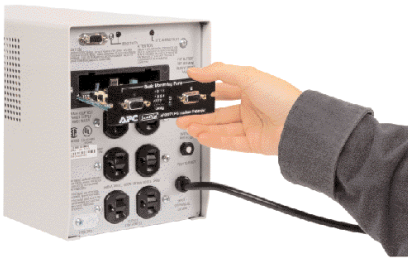
Alarms

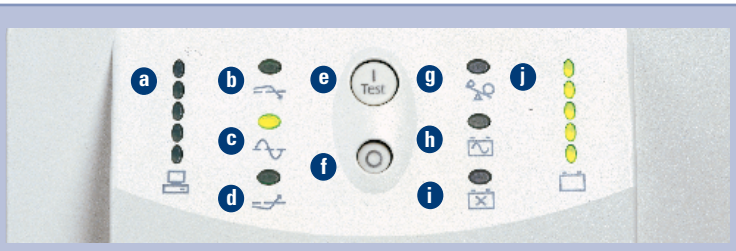
Audible alarms alert you to changes in operating environment and battery conditions. Some alarms are software configurable and most can also be suppressed or delayed to eliminate nuisance alarms.

APC Interactive Assistant

This Web-empowered technology enables administrators to complete a variety of tasks via APC's Web site, including troubleshooting potential problems and proactively updating their UPSs power management features within PowerChute. It gives the user a link back to APC to aid in diagnosing/ordering/replacing a bad battery, provides upgrade information, and assists the user with warranty registration.

APC Interactive Assistant also presents custom-tailored information to the user based upon variables such as their UPS model and what version of PowerChute they are running.





a Load Display*- Shows the power being drawn by the load and prevents you from exceeding capacity.

b SmartTrim LED*- LED lights when the UPS is correcting a high utility voltage condition.

c On-line LED- LED lights when the UPS is supplying utility power to the loads.

d SmartBoost LED*- LED lights when the UPS is correcting a low utility voltage condition.

e On/Test Button- Turns on the UPS and activates the UPS self-test and utility line voltage displays.

f Off Button- Turns off the UPS and the load. Specifically designed to prevent accidental shutdowns.

g Overload LED- LED lights and alarm sounds when the load connected to the UPS exceeds capacity.

h On-Battery LED- LED lights and alarm sounds when the UPS is supplying battery power to the load.

i Replace Battery LED- LED lights and alarm sounds when the UPS battery is nearly dead and must be replaced (typically within 30 days.)

j Battery Charge/Line Voltage Display*- Displays both present battery charge as a percentage of battery capacity and utility line voltage. Alarm sounds upon low battery condition.

**These features are not available on the SU420NET/620NET models.*

PowerChute *plus* power management software included

Meets the demands of high performance networks and enhances the reliability and manageability of network and web servers.

- **Browser Manageable**
  The Smart-UPS is easily manageable through standard browsers on local computers, networked computers or remote systems. (Requires PowerChute Web Device Manager running on a Windows NT web server on your network. See *www.apcc.com* for a free download.)

- **E-mail and Pager Alerts**
  APC Smart-UPS E-mails and/or pages you via PowerChute *plus* alerting you of power problems and allowing you to respond in order to maximize uptime.

- **Integrates with Server and Enterprise Management**
  All Smart-UPS are shipped with support for Dell Network/Node Manager, Compaq Insight Manager (Windows NT and Novell NetWare), HP TopTools and IBM NetFinity. Plug-ins for HP Openview, CA Unicenter, and Tivoli Netview are available separately.

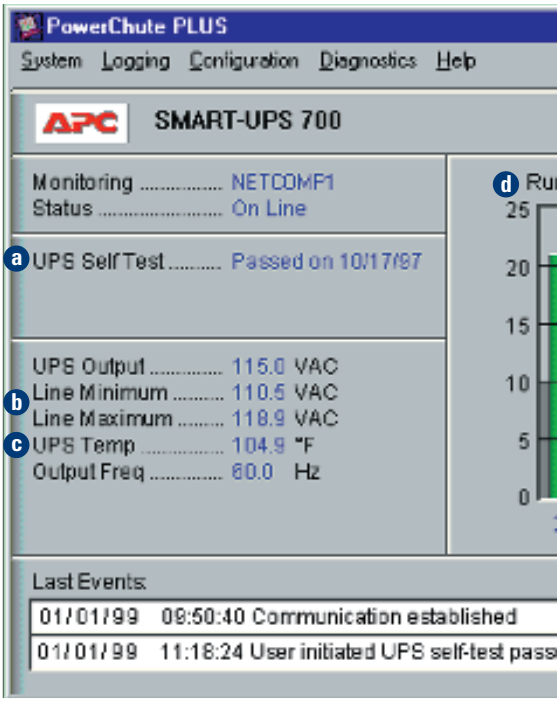
Built-in SmartSlot gives you the customizable performance you need

APC Smart-UPS are equipped with a built-in SmartSlot* allowing you to implement various UPS Accessory cards to customize and enhance the management of your APC Smart-UPS. APC's series of UPS accessories plug directly into the back of your UPS. When an APC accessory is installed in your UPS, it becomes an integral part of the unit, drawing power from the UPS even when the UPS is in "sleep mode." Optional accessories allow you to remotely reboot individual devices, monitor ambient temperature and humidity and work with Emergency Power-Off (EPO) systems. *(Accessories detailed on page 17)*

*(*Option not available on SU420NET/SU620NET models)*

Includes PowerChute® *plus* software for advanced UPS power management and diagnostics

APC Smart-UPS ship with APC's PowerChute® *plus* UPS power management and diagnostic software to provide network administrators with useful UPS information and great flexibility in configuring UPS reaction to power events. By tailoring each UPS to the network environment you can significantly enhance network performance and reliability. Use your APC Smart-UPS in conjunction with PowerChute *plus* for maximum, custom protection. In addition to extensive unattended system shutdown, you'll get UPS testing/status, remote UPS management and environmental/power monitoring. (PowerChute *plus* support for Novell NetWare, Windows, Windows 95/98, Windows NT/2000, Windows for Workgroups, SCO Unix, Red Hat, SuSE, Caldera, and TurboLinux included (other OSs available separately). PowerChute *plus* for use with other operating systems sold separately. Visit our website at *www.apcc.com* for more information.)



APC's PowerChute *plus* includes APC's PowerNet SNMP Agent (Windows NT and NetWare included with Smart-UPS) and also offers integration and compatibility with Compaq Insight Manager (Windows NT and NetWare only), IBM Netfinity and HP TopTools.

FlexEvents™ allow administrators to plan for and control crisis situations

FlexEvents allow users to customize the APC Smart-UPS reaction to all power events. For each possible power event the user has the option of choosing up to seven items from a list of possible UPS actions. Actions include: Log Event, Notify Administrator, Notify Users, Shut Down Server, Run Command File, Page, Send E-Mail. Customizing UPS actions allows you to plan for and control crisis situations before they can cause downtime or threaten data.

Software configurable features

Customize the operation of an APC Smart-UPS to your environment and needs. With PowerChute *plus* software, as well as the PowerNet SNMP Adapter, you can adjust eleven operating parameters. Settings are stored in APC Smart-UPS's permanent memory (EEPROM). The following parameters are adjustable:

UPS ID

Users may assign any 8 character string to assist in UPS identification. For example, UPS ID may be server name or UPS location.

Low transfer

Low transfer voltage may be moved downward to extend brownout range, or upward to protect sensitive equipment.

High transfer

High transfer voltage may be moved lower to protect sensitive equipment, or higher to conserve battery during extended high line voltage conditions.

Sensitivity

Sensitivity to line noise may be adjusted for fuel powered AC generator applications.

Self test

APC Smart-UPS automatically performs a self-test every two weeks, ensuring proactive detection of a weakening battery. Users can opt for weekly testing, testing at start-up only, or no automatic self-test.

Alarm

The audible alarm may be suppressed or delayed to eliminate nuisance alarms.

Shutdown delay

The delay between when the shutdown signal is sent from the CPU to UPS and when the UPS shuts down can be adjusted for special applications.

Turn-on delay

Allows multiple APC Smart-UPS on the same power grid or circuit to stagger or sequence their return from shutdown once the utility line returns.

a **UPS self test**- Unattended scheduled self-tests warn of faulty UPS or weak battery.

b **Min./Max. power line voltage**- Useful in determining power quality.

c **UPS temperature*-** Monitoring for proper UPS temperature to extend battery life.

d **Battery runtime**- Minutes of battery time left for system use and subsequent outages.

e **Utility line voltage**- Power quality display for fast problem diagnosis.

f **% UPS load**- Load capacity display to ensure correct UPS load.

*Not available on SU420NET/620NET models

Look across the LAN at any APC Smart-UPS from your workstation and check important data such as UPS operation, power line status and environmental conditions using the real-time graphical display of UPS/power status.

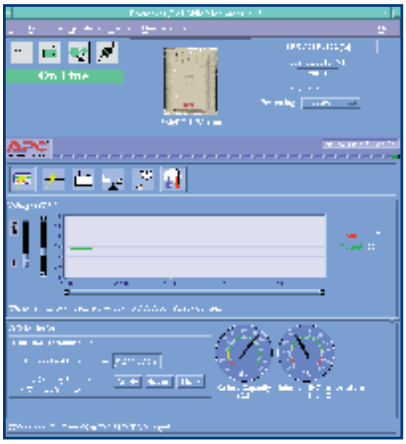
SNMP compatibility for enterprise UPS power management

SNMP Ready for Servers

The APC Smart-UPS series supports the Simple Network Management Protocol (SNMP) via APC's PowerNet SNMP family of products. PowerNet SNMP products deliver warnings regarding power events and UPS status to any Network Management Station whether the UPS is located 20 feet or 2000 miles away.

APC's PowerNet SNMP Agent, included with PowerChute plus permits you to monitor and control the APC UPSs protecting servers along your entire network data path.

This same worldwide power management capability for Smart-UPS protecting servers or internetworking equipment is available via the Web/SNMP Management Card (sold separately.)



PowerNet® SNMP Manager maximizes your management by presenting all UPS information in an intuitive graphical display. (Sold separately, Visit our website at www.apcc.com *for more information)*

Low battery capacity

The low battery warning may be moved from 2 minutes up to 10 minutes before battery exhaustion. This allows plenty of time for safe shutdown of complex applications.

Minimum battery capacity

When utility line returns after a shutdown, Smart-UPS can ensure that the batteries first recharge to allow for subsequent safe shutdown for file servers and CPUs. For telecom or hub applications APC Smart-UPS can be set to reboot immediately.

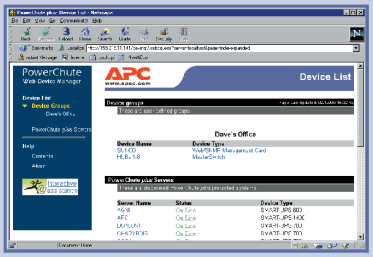
Lotus Notes server shutdown is included with PowerChute plus *for each platform Lotus Notes supports.*

All trademarks are the property of their owners

NEW for PowerChute® *plus*

PowerChute Web Device Manager

PowerChute Web Device Manager allows UPS monitoring utilizing a Web Browser. Users have access to their Web server UPS information from anywhere on the Internet or Intranet. It is no longer necessary for the administrator to be logged into the network in order to monitor the UPS/power information.



Microsoft BackOffice Compatible

APC's PowerChute® *plus* earned Microsoft's approval for use with BackOffice. PowerChute plus functions properly in the BackOffice environment and avoids conflicts with Microsoft Windows NT.

Schedule UPS self tests and shutdowns

Use PowerChute *plus* to schedule unattended UPS self tests, server shutdowns, and UPS runtime calibrations. SmartScheduling™ (not available for all operating systems) provides a more powerful and easier to use interface for scheduling of these actions.

DMI Compliant

PowerChute *plus* is now manageable via the DMI protocol permitting seamless integration with DMI-based server management packages such as Intel's LANDesk Server Manager.

WorkSafe™ feature

In the event of a power outage, PowerChute *plus* will activate the WorkSafe feature which saves open files and gracefully closes open applications. Applications supported include Microsoft Office, PerfectOffice, and Lotus SmartSuite.

Certification by operating system and application vendors

Since APC UPS software is tested and certified for operating systems such as Microsoft Windows NT, Novell Netware, IBM OS/2, Solaris, HP/UX, AIX, and SCO Unixware you are ensured of operating system vendor support, as well as compatible operation when using APC software.

Smart-UPS® Tower Series

Superior design, high volume manufacturing and continuous quality enhancement allow APC Smart-UPS to feature unsurpassed reliability.

NEW
Smart-UPS 5000
for high-powered and multi-server environments

XIOtech Partners with APC to Provide High Availability Storage Solutions

XIOtech manufactures a centralized, intelligent shared storage subsystem touted by industry experts as 'SAN (storage area networking) in a box'. We call it the Magnitude and it is capable of processing speeds in excess of 90,000 I/Os a second, which is 10 times faster than traditional enterprize RAID systems. Customers who purchase these products require rapid and continuous access to data.

Data access is critical to our customers. Our customers look to us to solve any challenges that might cause them to lose access to their data, including data path failure, drive failure, corrupt data tables, user error, adding storage, zero-backup window and power problems. We can't assume anything. We recognize that a corporation's data is the lifeblood of the company. Losing data means losing crucial competitive advantage.

Since power problems are one of the leading causes of downtime, we decided from the beginning to include the APC Smart-UPS® 2200 as part of the standard configuration of our Magnitude product. As an award-winning REDI (Remarkable Efficient Device I/O) Storage Architecture device, the Magnitude allows users to connect their most critical systems to a high-availability, centralized storage sub-system. We have users accessing multiple terabytes of data from NT and NetWare servers.

Today, as many as eight Intel servers can all share the same storage. In fact, this quarter we will announce connectivity support for hundreds of servers connected to the same storage subsystem, all powered by the APC Smart-UPS. We have installations in large financial organizations, pre-press companies, education, government, and hospitals, and they all rely on APC.

Dan McCormick
Director of Product Management
XIOtech

Smart-UPS 3000
for minicomputers, multiple servers and telecom equipment (Expandable run-time via 1 SU48BP battery pack)

Smart-UPS 2200
for multiple servers, telecom equipment and UNIX systems

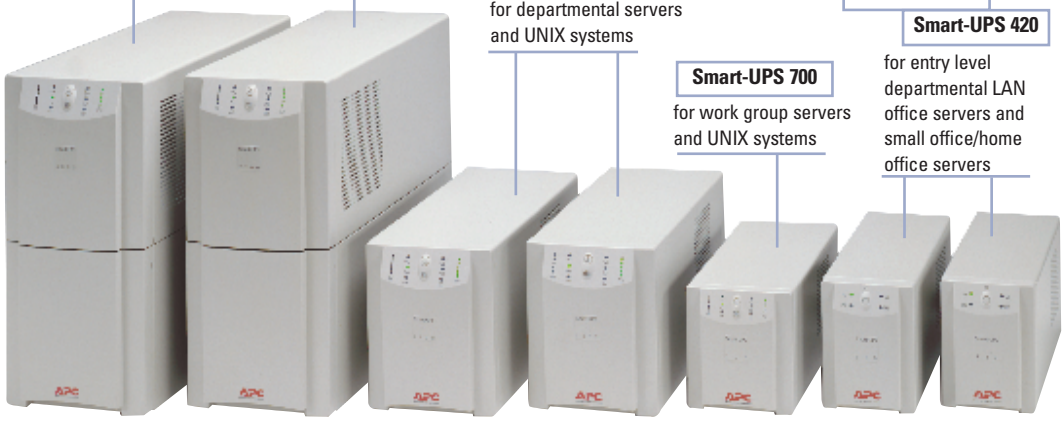
Smart-UPS 1400

Smart-UPS 1000
for departmental servers and UNIX systems

Smart-UPS 700
for work group servers and UNIX systems

Smart-UPS 620

Smart-UPS 420
for entry level departmental LAN office servers and small office/home office servers



APC Smart-UPS ship with PowerChute plus *software for Windows NT/2000, Novell NetWare, Windows 95/98, SCO Unixware, SCO OpenServer, and Linux. Includes agent plug-in for Compaq Insight Manager, HP TopTools, and IBM NetFinity Manager (NT and NetWare platforms).*

SPECIFICATION	SU420NET[1]	SU620NET[1]	SU700NET	SU1000NET	SU1400NET	SU2200NET	SU3000NET	SU5000T & AP9621
Ships with PowerChute *plus* software	Support for Windows NT/2000, Novell NetWare, Windows 95/98, SCO UnixWare, SCO OpenServer, and Linux. Includes agent plug-ins for Compaq Insight Manager, HP Top Tools, and IBM NetFinity Manager (NT and NetWare platforms.)							
Input Line, 6 ft. line cord	NEMA 5-15P					NEMA 5-20P	NEMA L-30P	NEMA L6-30P
Output Receptacles	4 NEMA 5-15R			6 NEMA 5-15R		8 NEMA 5-15R		1 NEMA L6-30R 2 NEMA L6-20R 14 NEMA 5-15R
Number of SmartSlot bays	n/a	n/a	1	1	1	1	1	2
Maximum Dimensions (H x W x D)(in.)	6.6 x 4.7 x 14.5		6.2 x 5.4 x 14.1	8.5 x 6.7 x 17.3		17 x 7.7 x 21.5		20.8 x 17.5 x 26.2
Net Weight (lbs.)	22	27	29	42	53	112	123	325
Shipping Weight (lbs.)	24	29	32	46	58	134	142	360
Replacement Battery Cartridge	RBC 2	RBC 4	RBC 5	RBC 6	RBC 7	RBC 11	RBC 11	Two RBC 12
"T" Level for Service Options	T1	T1	T2	T2	T3	T4	T4	T5
OPERATION	**SU420NET**	**SU620NET**	**SU700NET**	**SU1000NET**	**SU1400NET**	**SU2200NET**	**SU3000NET**	**SU5000T & AP9621**
Nominal Input Voltage	120 Vac, single phase, 50 or 60 Hz (auto-selectable)							208VAC (50-60 Hz)
Transfer Time (typical)	2 milliseconds, includes detection time							
On-Battery Output Voltage	Stepped sine wave output at 120 Vac		Pure sine wave output at 120 Vac +/-5%, -10% after low battery warning, synchronized to utility line					
SmartBoost and SmartTrim Operation	On-line operation for input between 90 and 145 Vac. Output will be 103 to 132 Vac. SmartBoost increases voltage 12% if input is 90 to 103 Vac. SmartTrim reduces voltage 12% if input is 145 to 132 Vac. Transfer points are user adjustable using software.[2,3]							
Capacity (Volt-Amps, Watts)	420, 260	620, 390	700, 450	1000, 670	1400, 950	2200, 1600	3000, 2250	4500, 3375
Surge energy rating, peak current capability	320 J, 6.5 kA		480 J, 6.5kA					
Normal, common mode clamping response time	0 ns, <5ns typical, meets UL 1449							
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.7% of peak typical		<0.3% of peak typical					
Batteries	Sealed, maintenance-free lead acid with 3-6 year typical lifetime.							
Recharge time to 90% capacity	5 hours		3 hours					6 hours
Ambient Operation	10,000 ft. (3,000 meters) max. elevation, 0-95% humidity non-condensing; 32 to 104 deg. F (0 to 40 deg C)							
Storage Conditions	50,000 ft. (15,000 meters) max. elevation; 5 to 113 deg. F (-15-45 deg. C)							
Audible noise at 3.3 ft. from surface of unit	<45 dBA	<45 dBA	<41 dBA	<41 dBA	<45 dBA	<45 dBA	<53 dBA	< 53 dBA
BTUs (hr.)	50	70	85	100	135	275	375	1708

TYPICAL RUNTIME									
LOAD Watts	(VA)	SU420NET	SU620NET	SU700NET	SU1000NET	SU1400NET	SU2200NET	SU3000NET[4] (w/ SU48BP)	SU5000T & AP9621
65	100	40min	1hr 14min	1hr 35min	2hr 25min	3hr 55min	7hr 5min	7h 10m (11h 9m)	9hr 27min
130	200	14min	30min	43min	1hr 14min	2hr 7min	4hr 15min	4h 20m (7h 41m)	6hr 17min
195	300	6min	15min	23min	46min	1hr 22min	2hr 58min	3h 3m (5h 36m)	4hr 39min
260	400	-	9min	14min	30min	58min	2hr 14min	2h 19m (4h 44m)	3hr 38min
325	500	-	6min	9min	21min	43min	1hr 45min	1h 50m (3h 50m)	2hr 58min
390	600	-	-	6min	15min	33min	1hr 25min	1h 29m (3h 18m)	2hr 29min
455	700	-	-	-	11min	26min	1hr 10min	1h 14m (2h 53m)	2hr 7min
520	800	-	-	-	9min	21min	1hr	1h 4m (2h 15m)	1hr 50min
585	900	-	-	-	7min	17min	51min	53m (2h 4m)	1hr 36min
650	1000	-	-	-	6min	14min	44min	46m (1h 47m)	1hr 25min
780	1200	-	-	-	-	9min	34min	37m (1h 31m)	1hr 8min
910	1400	-	-	-	-	7min	26min	28m (1h 15m)	56min
1040	1600	-	-	-	-	-	21min	22m (57m)	47min
1300	2000	-	-	-	-	-	14min	15m (37m)	34min
1430	2200	-	-	-	-	-	11min	12m (27m)	29min
1625	2500	-	-	-	-	-	-	5m (13m)	23min
1950	3000	-	-	-	-	-	-	-	17min
3500	5000	-	-	-	-	-	-	-	6min

[1] SU420 and SU620 also offer built-in dataline protection for RJ-11 and 10BaseT ethernet protection.

[2] SU420 and SU620 provide SmartBoost capacity up to 30% of input voltage only.

[3] SU5000T and AP9621 online operation for input 157-255, transfer points are user-adjustable using software.

[4] Additional battery pack (SU48BP) available for extra runtime.

Note: For the most recent sizing information, consult the Size-UPS section of APC's Web Site at *www.apcc.com/sizing.*

Smart-UPS® Rack-mount Series

APC's slimline rack-mount Smart-UPS delivers premium uninterruptible power and the most advanced performance features available.

Offered in a broad range of VA ratings, and designed to address a variety of network equipment configurations, Smart-UPS RMs are easy to install and are compatible with all popular rack systems, including the Compaq server rack.

With an advanced line-interactive design, PowerChute *plus* power management support for major network OSs, (including Windows NT and Novell Netware), and PowerNet SNMP support for Novell NMS, Compaq's Insight Manager, and other SNMP based NMSs, it's not surprising that APC UPSs protect more networks than all other UPS brands combined.

Smart-UPS RMs are equipped with a SmartSlot internal accessory slot to provide Web/SNMP management, control via modem or multi-OS shutdown with the addition of the appropriate card.

New!

APC Smart-UPS RM 700, 1000, and 1400 are for protection of servers, internetworking equipment, and PBX telecom systems. These Smart-UPS rack-mount units are only 2U (3.5") in height allowing more room to rack-mount other critical equipment. With longer runtime on battery, a faster and easier replacement battery chassis tray, improved voltage regulation, enhanced intelligent battery management, and a competitive price, the Smart-UPS 2U Rack-mount will be an excellent addition to your power protection solution.

For power requirements like internetworking equipment and thin servers, the PowerStack™ family (PS250/PS450) is ideally suited to meet your growing rack, stack or wall mounting requirements. The PowerStack was designed to protect unmanaged hubs, switches, small routers, thin servers, and small telephone key systems, all of which are often housed in remote wiring closets. PowerStack is 1U high, comes with four power outlets and has user replaceable, hot-swappable batteries. *(See www.apcc.com/products/smart-ups_rm/index.cfm* for more information and technical specs on the PowerStack family.)

APC Smart-UPS RMs protect your data

Your data is protected because Smart-UPS RMs supply network-grade battery backup when power fails. With PowerChute *plus* software or monitoring kits, APC Smart-UPS RMs will safely save your data and shut down your operating system before the battery is fully discharged, whether you're there or not.

APC Smart-UPS RMs protect your hardware

System life is extended through superior full-time multi-stage surge suppression and noise filtering. Novell approves this product for network protection, without additional external conditioners.

APC Smart-UPS RMs increase your overall system availability

SmartBoost™ and SmartTrim™ automatically correct low voltage and high voltage conditions allowing you to work through brownouts and overvoltages without using battery power.

APC Smart-UPS RMs reduce your cost

Smart-UPS RMs reduce your cost by decreasing downtime, and giving users increased control and power management. Users can further reduce costs with Smart-UPS RM user replaceable, hot-swappable batteries. Within minutes, a user can swap out a factory supplied battery while the load is still up and running, eliminating unnecessary service costs and downtime. (Typical battery life is three to six years.)

New! Smart-UPS 5000 (SU5000RMT and SU5000T) and 120V Step-Down Transformer (AP9621)

A typical high-powered server installation will require more power than a typical 120V service can supply (over 900W.) Multiple servers can easily require 5kVA of power. The servers would then need 2 or more separate 120V circuits. The solution is to power the servers by a single UPS - APC's new Smart-UPS 5000 (SU5000RMT and SU5000T) and Step-down transformer (AP9621).

The Smart-UPS 5000 is the first UPS offered with APC's Web/SNMP management card (AP9606) preinstalled through April 1, 2000. This product allows you to easily monitor and control your SU5000 over the World Wide Web or your network.

SPECIFICATION	SU700RM2U	SU1000RM2U	SU1400RM2U	SU2200RM3U	SU3000RM3U	SU3000RMNET(5U)	SU5000RMT & AP9621
Ships with PowerChute *plus* software	Support for Windows NT/2000, Novell NetWare, Windows 95/98, SCO UnixWare, SCO OpenServer, and Linux. Includes agent plug-ins for Compaq Insight Manager, HP Top Tools, and IBM NetFinity Manager (NT and NetWare platforms.)						
Input Line, 6 ft. line cord	NEMA 5-15P			NEMA 5-20P	NEMA L5-30P	NEMA L5-30P	NEMA L6-30P
Output Receptacles	6 NEMA 5-15R			8 NEMA 5-15R			1 NEMA L6-30R 2 NEMA L6-20R 14 NEMA 5-15R
Number of SmartSlot bays	1	1	1	1	1	1	2
Unit Height ("U" Height)	2U	2U	2U	3U	3U	5U	5U
Maximum Dimensions (H x W x D) (in.)	3.5 x 19 x 18			5.2 x 19 x 25		8.8 x 19 x 17.8	12.3 x 19 x 25
Net Weight (lbs.)	48	62	63	103	114	129	320
Shipping Weight (lbs.)	55	69	70	123	132	145	355
Replacement Battery Cartridge	RBC 22	RBC 23	RBC 24	RBC 12	RBC 11	RBC 11	Two RBC 12
"T" Level for Service Options	T2	T3	T3	T4	T4	T4	T5
OPERATION	**SU700RM2U**	**SU1000RM2U**	**SU1400RM2U**	**SU2200RM3U**	**SU3000RM3U**	**SU3000RMNET(5U)**	**SU5000RMT & AP9621**
Nominal Input Voltage	120 Vac, single phase, 50 or 60 Hz (auto-selectable)						208 Vac, 50-60 Hz.
Transfer Time (typical)	2 milliseconds, includes detection time						
On-Battery Output Voltage	Pure sine wave output at 120 Vac +/-5%, -10% after low battery warning, synchronized to utility line						
SmartBoost and SmartTrim Operation[1]	On-line operation for input between 90 to 145 Vac. Output will be 103 to 132 Vac. SmartBoost increases voltage 12% if input is 90 to 103 Vac. SmartTrim reduces voltage 12% if input is 145 to 132 Vac. Transfer points are user adjustable using software.[2]						
Capacity (Volt-Amps, Watts)	700, 450	1000, 670	1400, 950	2200, 1600	3000, 2250	3000, 2250	4500, 3375
Surge energy rating, peak current capability	480 J, 6.5kA			320 J, 6.5 kVA			480 J, 6.5 kVA
Normal, common mode clamping response time	0 ns, <5ns typical, meets UL 1449						
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.3% of peak typical						
Batteries	Sealed, maintenance-free lead acid with a 3-6 year typical lifetime.						
Recharge time to 90% capacity	3 hours						6 hours
Ambient Operation	10,000 ft. (3,000 meters) max. elevation, 0-95% humidity non-condensing; 32 to 104 deg. F (0-40 deg. C)						
Storage Conditions	50,000 ft. (15,000 meters) max elevation; 5 to 113 deg. F (-15-45 deg. C)						
Audible noise at 1 meter from surface of unit	<42 dBA	<45 dBA	<45 dBA	<47 dBA	<47 dBA	<53 dBA	<53 dBA
BTUs/hr.	68	89	171	275	375	375	1708

TYPICAL RUNTIME

LOAD		SU700RM2U	SU1000RM2U	SU1400RM2U	SU2200RM3U	SU3000RM3U	SU3000RMNET(5U)[3] (w/SU48BP)	SU5000RMT & AP9621
65	100	1hr 35min	3hr 10min	4hr 10min	5hr 47min	5hr 52min	7hr 10min (11hr 7min)	9hr 27min
130	200	43min	1hr 41min	2hr 16min	3hr 26min	3hr 31min	4hr 20min (7hr 41min)	6hr 17min
195	300	23min	1hr 4min	1hr 28min	2hr 22 min	2hr 27min	3hr 3min (5hr 36min)	4hr 39min
260	400	14min	44min	1hr 3min	1hr 46min	1hr 50min	2hr 19min (4hr 44min)	3hr 38min
325	500	9min	32min	47min	1hr 22min	1hr 26min	1hr 50min (3hr 50min)	2hr 58min
390	600	6min	24min	36min	1hr 6min	1hr 10min	1hr 29min (3hr 18min)	2hr 29min
455	700	-	18min	28min	54min	58min	1hr 14min (2hr 53min)	2hr 7min
520	800	-	14min	23min	45min	44min	1hr 4min (2hr 15min)	1hr 50min
585	900	-	11min	18min	38min	41min	53min (2hr 4min)	1hr 36min
650	1000	-	9min	15min	33min	36min	46min (1hr 47min)	1hr 25min
780	1200	-	-	11min	24min	26min	37min (1hr 31min)	1hr 8min
910	1400	-	-	8min	19min	21min	28min (1hr 15min)	56min
1040	1600	-	-	-	14min	16min	22min (57min)	47min
1300	2000	-	-	-	9min	10min	15min (37min)	34min
1430	2200	-	-	-	8min	9min	12min (27min)	29min
1625	2500	-	-	-	-	5min	5min (13min)	23min
1950	3000	-	-	-	-	-	-	17min
3500	5000	-	-	-	-	-	-	6min

[1] For the SU700RM2U, SU1000RM2U, SU1400RM2U: On-line operation for input between 82 to 144 Vac yields an output of 106 to 107 Vac. Voltage boost increases the voltage up to 30%.

[2] .SU5000T & AP9621 online operation for input 157-255, transfer points are user-adjustable using software.

[3] Additional battery pack available for extra runtime; in order to rack-mount this product you will need to purchase a SU035 Battery shelf.

Note: For the most recent sizing information, consult the Size-UPS section of APC's Web Site at *www.apcc.com/sizing*

Smart-UPS® 208V Tower and Rack-mount Series

APC Smart-UPS 208V Series means reliability. The SmartSlot™ internal accessory slot allows you to install optional accessory boards to customize and enhance the performance of your APC Smart-UPS, while CellGuard extends battery life and maximizes uptime.

208V High Voltage UPS for today's changing data processing and telecom equipment

A trend in the data processing and telecommunications hardware is to use "high voltage" 208V power supplies. The higher voltage actually uses less current, requires smaller wiring and circuit protection, and can deliver much more power through plugs and receptacles. The Smart-UPS 208 Series is specifically designed to accommodate the requirements of this fast growing trend.

High voltage (208V) is available everywhere you have 120V and can easily be tapped into by an electrician. Computer and telecommunications manufacturers have always used 208V for their high powered equipment, but now are using the same technology in their smaller equipment. Many systems have auto sensing power supplies that can run on either 208V or 120V. Contact your equipment vendor to convert your 120V power supply plug into a 208V plug (see p. 20 for plug types.)

The Smart-UPS 208V Series uses a 208 Volt input to supply high quality 208 Volt and 120 Volt output. Designed to support a large 208 Volt PBX or computer load, the Smart-UPS 208V Series also provides up to 400VA of 120V output through two additional outlets. By supporting 120 peripheral equipment such as monitors, modems, or internetworking equipment, the innovative design of the Smart-UPS 208V Series saves administrators the expense of a separate, 120V UPS.

Expandable runtime power protection for telecom and other 208V equipment

When a power problem corrupts data or causes a computer-based telecom system to freeze or "hard crash," the cost of downtime and recovery can start at several thousand dollars per hour and go upwards of $120,000 (for a telecom-intensive catalog sales company). APC's Smart-UPS 208V Series keeps your company and its communications moving forward. The loss of phone systems can mean the loss of customers and thousands of dollars in product orders along with reduced customer satisfaction. The Smart-UPS 208V Series combines product performance, ease-of-use, and reliability to offer the ultimate UPS solution specifically designed for Northern Telecom Meridian products, PBX equipment, high voltage servers, and other 208Vac equipment.

The Smart-UPS XLT and RMXLT can help a business to survive a prolonged power outage. The Smart-UPS XLT and RMXLT products increase runtime or maintain existing runtime on a growing system by simply plugging in up to ten additional battery packs (5 RMXLBPs on the SU2200RMXLT). The Smart-UPS XLT and RMXLT also lower operating and maintenance costs by reducing the number of hard failures and by eliminating a large portion of "No Trouble Found" service calls.

NEW! Smart-UPS 5000 (SU5000T and SU5000RMT) - 5kVA UPS

A typical rack installation or high powered server will require more power than a typical 120V service can supply (over 900W). A 42U rack can easily require 5 kVA of power for example. A rack system would then need 2 or more separate 120V circuits which typically must be brought in from different rooms or locations. The solution is to power the rack with 208V and just one circuit supported by APC's new Smart-UPS 5000. With the addition of the Step-down transformer (AP9621) you get up to 4500 VA of 120 VAC power.

The Smart-UPS 5000 is the first UPS offered with APC's Web/SNMP management card (AP9606) pre-installed through April 1, 2000. This product allows you to easily monitor and control your SU5000 over your intranet or network. In addition, the SU5000RMT5U has the most compact form factor of any 5kVA rackmount system.

	Tower Units			Rack-mount Units		
SPECIFICATION	**SU2200XLTNET**	**SU3000TNET**	**SU5000T**	**SU2200RMXLTNET**	**SU3000RMT3U**	**SU5000RMT5U**
Ships with PowerChute *plus* software	Support for Windows NT/2000, Novell NetWare, Windows 95/98, SCO UnixWare, SCO OpenServer, and Linux. Includes agent plug-ins for Compaq Insight Manager, HP Top Tools, and IBM NetFinity Manager (NT and NetWare platforms.)					
Uses Additional Battery Pack #	SU48XLBP	SU48BP	N/A	SU48RMXLBP	N/A	N/A
Input Plug	NEMA L6-20P		NEMA L6-30P		NEMA L6-20P	NEMA L6-30P
Output Receptacles (all T models provide 400VA of 120V power)[1]	2 NEMA L6-30R 1 NEMA L6-20R , 2 NEMA 5-15R		1 NEMA L6-30R, 2 NEMA L6-20R, 2 NEMA 5-15R	2 NEMA L6-30R, 1 NEMA L6-20R, 2 NEMA 5-15R	1 NEMA L6-30R, 2 NEMA L6-20R, 2 NEMA 5-15R	
Number of SmartSlot Bays	1	1	2	1	1	2
Maximum Dimensions (inches)	17 x 7.7 x 21.5		17.3 x 9 x 26.2	8.8 x 19 x 17.8	5.2 x 19 x 26	8.8 x 19 x 25
Net Weight (lbs)	137	137	230	132	129	225
Shipping Weight (lbs)	167	156	250	151	147	245
Replacement Battery Cartridge	RBC 11	RBC 11	Two RBC 12	RBC 11	RBC 12	Two RBC 12
"T" Level for Service Options	T4	T4	T5	T4	T4	T5
OPERATION	**SU2200XLTNET**	**SU3000TNET**	**SU5000T**	**SU2200RMXLTNET**	**SU3000RMT3U**	**SU5000RMT5U**
Nominal Input Voltage	208 Vac, single phase, 50 or 60 Hz (auto-selectable)					
Transfer Time (typical)	2 milliseconds, includes detection time					
On-Battery Output Voltage	Pure sine wave output at 208 Vac and 120 Vac +/-5%, -10% after low battery warning, synchronized to utility line					
SmartBoost and SmartTrim Operation	On-line operation for input between 160 to 250 Vac. Output will be 185 to 220 Vac. SmartBoost increases voltage 12% if input is 160 to85 Vac. SmartTrim reduces voltage 12% if input is 250 to 220 Vac. Transfer points are user adjustable using software.					
Capacity (Volt-Amps, Watts)	2200/1600	3000/2250	5000/3750	2200/1600	3000/2250	5000/3750
Surge energy rating, peak current capability	480 J, 6.5kA					
Normal, common mode clamping response time	0 ns, <5ns typical					
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.3% of peak typical, meets UL 1449					
Batteries	Sealed, maintenance-free lead acid with a 3-6 year typical lifetime.					
Recharge time to 90% capacity	3 hours					
Ambient Operation	10,000 ft. (3,000 meters) max. elevation, 0-95% humidity non-condensing; 32 to 104 deg. F (0-40 deg. C)					
Storage Conditions	50,000 ft. (15,000 meters) max elevation; 5 to 113 deg. F (-15-45 deg. C)					
Audible noise at 3.3 feet from surface of unit	<53 dBA					
BTUs/hr.	275	375	430	303	375	430

[1]All "T" models provide 400VA of 120V power. The 120 VAC output is a fixed ratio from the 208 VAC output.

TYPICAL RUNTIME (IN MINUTES)
SU2200XLT uses the SU48XLBP. SU2200RMXLT uses the SU48RMXLBP. SU3000TNET uses the SU48BP. See page 16 for specifications and information regarding the UXBP48.

LOAD (WATTS)	LOAD (VA)	2200XLT, & 2200RMLXT	1 SU48XLBP	2 SU48XLBP or 1 SU48RMXLBP	3 SU48XLBP	4 SU48XLBP or 2 SU48RMXLBP or 1 UXBP48	2 UXBP48	SU3000TNET (w/SU48BP)	SU3000RMT3U	SU5000T & SU5000RMT5U
70	100	6h 47m	13h 52m	20h 58m	28h 4m	35h 10m	65h 13m	7h 10m(11h 9m)	5h 32m.	9h 27m
140	200	4h 8m.	8h 40m	13h 12m	17h 44m	32h 16m	41h 28m	4h 20m (7h 41m)	3h 21m	6h 17min
210	300	2h 54m	6h 13m	9h 33m	12h 53m	16h 13m	30h 19m	3h 3m (5h 36m)	2h 19m	4h 39m
280	400	2h 11m	4h 48m	7h 26m	10h 4m	12h 42m	23h 51m	2h 19m (4h 44m)	1h 44m	3h 38m
350	500	1h 44m	3h 53m	6h 3m	8h 14m	10h 24m	19h 37m	1h 50m (3h 50m)	1h 21m	2h 58m
420	600	1h 24m	3h 14m	5h 5m	6h 56m	8h 47m	16h 33m	1h 29m (3h 18m)	1h 5m	2h 29m
490	700	1h 10m	2h 45m	4h 22m	5h 58m	7h 35m	14h 25m	1h 14m (2h 53m)	54m	2h 7m
560	800	59m	2h 23m	3h 43m	5h 14m	6h 40m	12h 43m	1h 4m (2h 15m)	45m	1h 50m
630	900	51m	2h 5m	3h 22m	4h 38m	5h 55m	11h 22m	53m (2h 4m)	38m	1h 36m
700	1000	44m	1h 51m	3h	4h 10m	5h 19m	10h 15m	46m (1h 47m)	32m	1h 25m
840	1200	33m	1h 29m	2h 27m	3h 26m	4h 25m	8h 34m	37m (1h 31m)	24m	1h 8m
980	1400	26m	1h 13m	2h 3m	2h 54m	3h 44m	5h 20m	28m (1h 15m)	18m	56m
1120	1600	21m	1h 1m	1h 45m	2h 30m	3h 14m	6h 24m	22m (57m)	14m	47m
1400	2000	14m	45m	1h 20m	1h 55m	2h 31m	5h 4m	15m (37m)	9m	34m
1540	2200	11m	39m	1h 10m	1h 42m	2h 15m	4h 34m	12m (27m)	8m	29m
1750	2500	-	-	-	-	-	-	5m (13m)	6m	23m
2100	3000	-	-	-	-	-	-	-	5m	17m
2800	4000	-	-	-	-	-	-	-	-	11m
3500	5000	-	-	-	-	-	-	-	-	8m

Note: For the most recent sizing information, consult the Size-UPS section of APC's Web Site at *www.apcc.com/sizing*

Smart-UPS® XL and RMXL

Smart-UPS Availability

- **Achieving 99.999% uptime requires a UPS with a runtime of greater than one hour or a generator.**
- **Up-time levels of performance can be dramatically enhanced by increasing the run time of your UPS from five minutes to (1) hour.**

Additional information about "availability" can be found on APC's Web site (*www.apcc.com*). Once you have entered APC's home page, please locate the "search Web site" section, and then type "white papers" into the search block area. Your search will present a new page where you will be able to click on "white papers." At this point, click on title T19 to obtain more information about "availability."

Expandable, extended run power

APC's Smart-UPS XL is ideal for mission critical applications where long runtimes are essential. Example applications include telephone PBXs, order entry data base servers, computers supporting manufacturing or service operations and critical data communications links. The XL allows a business to survive a prolonged power outage. With the Smart-UPS XL, runtime can be added by simply plugging in additional battery packs. 208V extended-run units are also available. (See pages 12 and 13)

Cost-effective solution

In many cases, extended-run capability is achieved by over-sizing the UPS itself. For example, in applications where the load capacity must be at least 900VA, this would usually mean a much more expensive UPS rated for 3000VA. An oversized UPS solution requires the installation of special building wiring which can cost well over $1000 (often as much as the UPS itself).

Acceptable Availability	99.99%	99.999%
Required Run-time	>5 minutes	>1 hour
Suggested UPS	Smart-UPS	Smart-UPS XL or RMXL

Increased productivity

SmartBoost and SmartTrim automatically correct low voltage and high voltage conditions allowing you to work through brownouts and overvoltages without using battery power.

APC Smart-UPS XLs have the most advanced performance features available

CellGuard intelligent battery management improves reliability and extends battery life. SmartSlot internal accessory slot allows you to install optional accessory cards to customize and enhance the performance management of your APC Smart-UPS. PowerChute *plus* software provides extensive UPS power management and diagnostics. Also, the QuickSwap user-replaceable battery system allows you to hot-swap batteries on site, while the system is up and running.

Low cost shipping and installation

Some extended run UPS systems must be shipped via special truck and unloaded on a special dock to handle the large size and weight of the UPS. In contrast, the modular design of the Smart-UPS XL and its batteries allow them to be delivered directly by common carrier.

APC Smart-UPS XL and RMXL families include units ranging from 700VA to 2200VA. Additional battery packs are available to increase system availability (see page 15).

	Tower Units			Rack-mount Units		
SPECIFICATION	**SU700XLNET**	**SU1000XLNET**	**SU2200XLNET**	**SU1400RMXLNET**	**SU2200RMXLNET**	**SU3000RMNET**
Ships with PowerChute *plus* software	Support for Windows NT/2000, Novell NetWare, Windows 95/98, SCO UnixWare, SCO OpenServer, and Linux. Includes agent plug-ins for Compaq Insight Manager, HP Top Tools, and IBM NetFinity Manager (NT and NetWare platforms.)					
Input Line - 6 ft. line cord	NEMA 5-15P		NEMA L5-30P	NEMA 5-20P	NEMA L5-30P	NEMA L5-30P
Output Receptacles	6 NEMA 5-15R					8 NEMA 5-15R
Number of SmartSlot bays	1 Smart Slot Bay included					
Maximum Dimensions (H x W x D) (in)	8.5 x 6.7 x 17.3		17 x 7.7 x 21.5	8.8 x 19 x 17.8		
Net Weight (lb)	53	60	121	115	124	129
Shipping Weight (lb)	58	65	140	134	143	145
Replacement Battery Cartridge	RBC 7	RBC 7	RBC 11	RBC 11	RBC 11	RBC11
"T" Level for Service Options	T3	T3	T4	T4	T4	T4
OPERATION	**SU700XLNET**	**SU1000XLNET**	**SU2200XLNET**	**SU1400RMXLNET**	**SU2200RMXLNET**	**SU3000RMNET**
Nominal Input Voltage	120 Vac, single phase, 50 or 60 Hz (auto-selectable)					
Transfer Time (typical)	2 milliseconds, includes detection time					
On-Battery Output Voltage	Pure sine wave output at 120 Vac +/-5%, -10% after low battery warning, synchronized to utility line					
SmartBoost and SmartTrim Operation	On-line operation for input between 90 to 145 Vac. Output will be 103 to 132 Vac. SmartBoost increases voltage 12% if input is 90 to 103 Vac. SmartTrim reduces voltage 12% if input is 145 to 132 Vac. Transfer points are user adjustable using software.					
Capacity (Volt-Amps, Watts)	700, 450	1000, 670	2200, 1600	1400, 950	2200, 1600	3000, 2250
Surge energy rating, peak current capability	320 Joules, 6.5kA		480 Joules, 6.5kA			
Normal, common mode clamping response time	0 ns, <5ns typical, meets UL 1449					
Normal mode surge voltage let through (IEEE 587 Cat. A 6kV test)	<0.3% of peak typical					
Batteries	Sealed, maintenance-free lead acid batteries with a 3-6 year typical lifetime. 3 hour typical recharge time to 90%.					
Ambient Operation	10,000 ft. (3,000 meters) max. elevation, 0-95% humidity non-condensing; 32 to 104 deg.F (0-40 deg. C)					
Storage Conditions	50,000 ft. (15,000) meters max.elevation; 5 to 113 deg. F (-15 to 45 deg. C)					
Audible noise at 1 meter from surface of unit	<42 dBA	<42 dBA	<53 dBA	<45 dBA	<53 dBA	
BTUs/hr.	100	120	305	155	155	375
BATTERY PACK OPTIONS	**SU700XLNET**	**SU1000XLNET**	**SU2200XLNET**	**SU1400RMXLNET**	**SU2200RMXLNET**	**SU3000RMNET**
Extended runtime	SU24XLBP	SU24XLBP	SU48XLBP	SU48RMXLBP	SU48RMXLBP	SU48BP
Ultra-extended runtime	UXBP24	UXBP24	UXBP48	UXBP48	UXBP48	N/A

Smart-UPS XL, RMXL and UX Battery Packs

Long battery life

By packaging the batteries in an enclosure separate from the UPS electronics, the batteries operate at reduced temperatures. Battery life is further enhanced through CellGuard intelligent battery management with high precision FastCharge™ and automatic true-load battery tests.

APC Smart-UPS XL increases your availability with N+1 batteries

Extended battery packs running in parallel with internal batteries provide both extended runtime, and also redundancy if a battery should fail. Smart-UPS XL battery packs are hot-swappable so you never have to take down your mission-critical loads to service the unit. Novell approves this product for network protection, without additional external conditioners.

Fault tolerance

Redundant batteries increase Smart-UPS XLs fault tolerance. This feature eliminates unit shutdown due to a single battery's failure.

Simple maintenance

A battery change usually requires trained service personnel or an expensive electrician. However, this is not the case with APC's Smart-UPS XL and RMXL. The modular Smart-UPS XL lets the user easily replace battery packs in minutes while the protected equipment remains up and running.

UXBP24 and UXBP48 Battery packs

The UXBP24 and UXBP48 are Ultra-extended run Battery Packs designed to be used with Smart-UPS products. The combination provides expandable and extended-run power protection for maximum up-time at an economical price. They are ideal for mission critical applications where ultra-long runtimes are essential. The UXBP24 and UXBP48 are 24V and 48V offerings, respectively.

UXBP24 and UXBP48 offer:

- **Low installation & servicing costs-** Polarized connectors ensure a safe and fast installation or replacement, eliminating the need for an electrician and expensive service contracts.
- **Space efficient-** Battery packs are designed to be stacked 4 high.
- **Flexible-** Battery packs can be used with either the Smart-UPS XL or Smart-UPS RMXL products.

Smart-UPS® XL, RMXL and UX Battery Packs

APC Smart-UPS with UX battery packs provide ultra-extended runtime for maximum uptime

	Battery Packs		
SPECIFICATION	**SU24XLBP/SU48XLBP/SU48BP**	**SU48RMXLBP**	**UXBP24/UXBP48**
Maximum Dimensions (H x W x H)	8.5 x 6.7 x 7.3"	7 x 19 x 8"	12.2 x 17.6 x 29.7"
Net Weight (lbs.)	69 lb.	136 lb.	280 lb.
Shipping Weight (lbs.)	73 lb.	153 lb.	314 lb.
Replacement Battery Cartridge	RBC11	(2) RBC11	RBC13
"T" Level for Service Options	T3	T4	T4
OPERATION	**SU24XLP/SU48XLBP/SU48BP**	**SU48RMXLBP**	**UXBP24/UXBP48**
Batteries	Sealed, maintenance-free lead acid batteries with a 3-6 year typical lifetime.		
Ambient Operation	10,000 ft. (3,000 meters) max. elevation, 0-95% humidity non-condens ing; 32 to 104 deg.F (0-40 deg. C)		
Storage Conditions	50,000 ft. (15,000) meters max.elevation; 5 to 113 deg. F (-15 to 45 deg. C)		

TYPICAL RUNTIME FOR SU700XLNET & SU1000XLNET (SU700XLNET & SU1000XLNET USE THE SU24XLBP)

LOAD WATTS	(VA)	SU700XLNET & SU1000XLNET	1 SU24XLBP	2 SU24XLBP	3 SU24XLBP	4 SU24XLBP or 1 UXBP24	5 SU24XLBP	6 SU24XLBP	8 SU24XLBP or 2 UXBP24	3 UXBP24
70	100	4hr 7min	13hr 10min	22hr 14min	31hr 18min	40hr 22min	49hr 26min	58hr 30min	78hr 46min	116hr 6min
140	200	2hr 5min	7hr 10min	12hr 16min	17hr 22min	22hr 28min	27hr 34min	32hr 40min	44hr 4min	65hr 4min
210	300	1hr 19min	4hr 50min	8hr 22min	11hr 55min	15hr 28min	19hr	22hr 33min	30hr 29min	45hr 5min
280	400	55min	3hr 35min	6hr 17min	9hr	11hr 44min	14hr 27min	17hr 10min	23hr 15min	34hr 26min
350	500	40min	2hr 48min	5hr	7hr 12min	9hr 24min	11hr 37min	13hr 49min	18hr 44min	27hr 49min
280	600	30min	2hr 17min	4hr 7min	5hr 58min	7hr 49min	9hr 41min	11hr 32min	15hr 40min	23hr 18min
490	700[1]	23min	1hr 50min	3hr 22min	4hr 55min	6hr 28min	8hr	9hr 33min	13hr 4min	19hr 28min
560	800[1]	18min	1hr 34min	2hr 55min	4hr 17min	5hr 38min	7hr	8hr 21min	11hr 28min	17hr 6min
630	900[1]	14min	1hr 22min	2hr 34min	3hr 47min	5hr 1min	6hr 14min	7hr 27min	10hr 12min	15hr 15min

[1] SU1000XLNET only

TYPICAL RUNTIME FOR THE SU2200XLNET, SU1400RMXLNET, SU2200RMXLNET & SU3000RMNET(5U)
(SU2200XLNET USES THE SU48XLBP; THE SU1400RMXLNET & SU2200RMXLNET USE THE SU48RMXLBP; SU3000RMNET USES THE SU48BP)

LOAD WATTS	(VA)	SU1400RMNET SU2200XLNET, SU2200RMXNET	1 SU48XLBP	2 SU48XLBP or 1 SU48RMXLBP	3 SU48XLBP	4 SU48XLBP, 2 SU48RMXLBP, or 1 UXBP48	6 SU48XLBP or 3 SU48RMXLBP	8 SU48XLBP or 4 SU48RMXLBP, or 2 UXBP48	3 UXBP48	SU3000RMNET(5U) (w/SU48BP)[1]
70	100	6hr 45min	13hr 51min	20hr 57min	28hr 2min	35hr 8min	49hr 20min	65hr 11min	94hr 24min	7h 10m(11h 7m)
140	200	4hr	8hr 24min	12hr 49min	17hr 13min	21hr 38min	30hr 27min	40hr 19min	58hr 28min	4h 20m(7h 41m)
210	300	2hr 46min	5hr 57min	9hr 9min	12hr 21min	15hr 33min	21hr 57min	29hr 6min	42hr 16min	3h 3m(5h 36m)
280	400	2hr 3min	4hr 33min	7hr 4min	9hr 34min	12hr 5min	17hr 6min	22hr 43min	33hr 3min	2h 19m(4h 44m)
350	500	1hr 36min	3hr 39min	5hr 43min	7hr 47min	9hr 50min	13hr 53min	18hr 35min	27hr 6min	1h 50m(3h 50m)
420	600	1hr 18min	3hr 2min	4hr 46min	6hr 32min	8hr 17min	11hr 47min	15hr 42min	22hr 56min	1h 29m(3h 18m)
490	700	1hr 4min	2hr 34min	4hr 5min	5hr 36min	7hr 8min	10hr 10min	13hr 35min	19hr 52min	1h 14m(2h 53m)
560	800	54min	2hr 13min	3hr 33min	4hr 54min	6hr 14min	8hr 56min	11hr 57min	17hr 30min	1h 4m(2h 15m)
630	900	46min	1hr 56min	3hr 8min	4hr 20min	5hr 32min	7hr 57min	10hr 39min	15hr 38min	53m (2h 4m)
700	1000	40min	1hr 42min	2hr 47min	3hr 53min	4hr 58min	7hr 9min	9hr 36min	14hr 6min	46m (1h 47m)
840	1200	30min	1hr 22min	2hr 16min	3hr 11min	4hr 6min	5hr 56min	8hr	11hr 47min	37m (1h 31m)
1120[2]	1600[2]	18min	56min	1hr 36min	2hr 18min	2hr 59min	4hr 23min	5hr 57min	8hr 50min	28m(1h 15m)
1400[2]	2000[2]	12min	41min	1hr 12min	1hr 46min	2hr 19min	3hr 26min	4hr 42min	7hr 1min	22m (57m)
1540[2]	2200[2]	10min	35min	1hr 4min	1hr 34min	2hr 4min	3hr 5min	4hr 14min	6hr 21min	15m (37m)

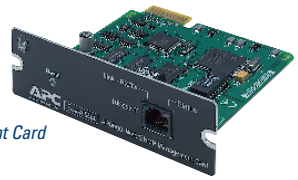
[1] In order to rack-mount this product you will need to purchase a SU035 Battery Shelf.
[2] SU2200XLNET and SU2200RMXLNET only.

Note: For the most recent sizing information, consult the Size-UPS section of APC's Web Site at *www.apcc.com/sizing*.

Management Peripherals for Smart-UPS

Customize your power protection solution with Management Peripherals from APC

The SmartSlot in Smart-UPS* integrates a variety of management peripherals to provide custom solutions for your monitoring requirements.



Web/SNMP Management Card

Reboot hung servers via Web, SNMP, or Telnet

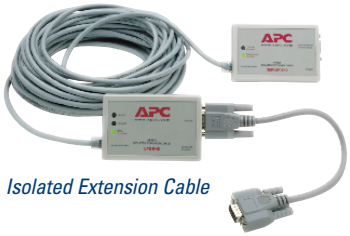
From your Network Management Station you may use the 10Base-T Ethernet Web/SNMP Management Card (AP9606) and/or Token Ring (AP9603) SNMP Card. Perform remote UPS shutdown, reboot, and other management and diagnostic functions.

Integrate smoke or halon alarms, telephone switches and other dry contact closures

Relay I/O (AP9610) allows you to control and monitor devices through a simple dry contact interface. This is a common interface for PBX, telecom, and alarm systems.

Monitor temperature, humidity and rack security

Smoke alarms and halon alarms can also be monitored with the Environmental Monitoring Card (AP9612TH) through the PowerChute plus, PowerNet SNMP, the Web/SNMP Management Card, or the Out-of-Band Management Card interface. The alarm switch kit (AP9513) is designed to notify users when a monitored access point has been breeched (when used in conjunction with AP9612TH). This is easily integrated within the NetShelter rack enclosure.



Isolated Extension Cable

Extended UPS monitoring

The Isolated Extension Cable (IEC) is designed to provide bulletproof serial monitoring of an APC UPS for extended distances up to100 meters (AP9825).

Reboot hung servers and networking equipment remotely via modem

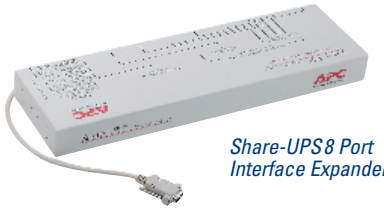
The Out-of-band Management Card (AP9608) provides complete UPS information, paging on power problems and remote safe reboot of servers via user supplied modem.

Safely shutdown up to three servers

The 2-port Interface Expander Card (AP9607) provides two additional ports to facilitate graceful system shutdown via dependable hardwire connections and allows advanced UPS management. The unit is ideal for "server farms" or multiple operating system environments, since all three servers can be running different OSs.

Shutdown multiple servers from one UPS

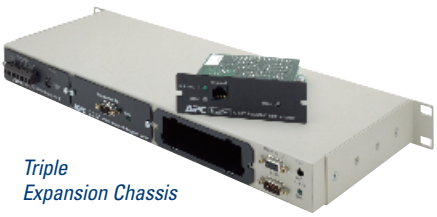
Connect up to 8 completely OS-independent servers to a single UPS with Share-UPS™ (AP9207) 8-Port interface expander (15 servers with 2 Share-UPS). Share-UPS integrates with PowerChute plus software. Each server runs its own copy of PowerChute plus software, for graceful shutdown in the event of an extended power outage.



Share-UPS 8 Port Interface Expander

Integrate multiple accessories

The Triple Expansion Chassis (AP9604) is an external, 1U, 19" rack-mountable device that allows integration of additional UPS slot accessories with a Smart-UPS, Matrix, or Symmetra Power Array. Triple Expansion Chassis can be used in a rack environment or as a stand-alone device that allows you to add up to three (3) slot cards to UPSs that have an existing slot already in use.



Triple Expansion Chassis

MasterSwitch™ family of remote reboot device

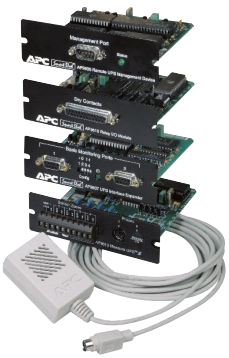
The MasterSwitch family has expanded its offering from MasterSwitch (AP9211) for 120V remote reboot and on/off control of attached equipment to include the following additions: MasterSwitch (AP9212) for 208V remote reboot ad on/off control of attached equipment; and MasterSwitch Plus (AP9255 and AP9225EXP), which combines MasterSwitch and the 8-Port Interface Expander, for unattended loadshedding based off of UPS events. All of these products have a standard web interface with the ability to be controlled over the World Wide Web via a secure MD5 connection. (For more information on these products visit *www.apcc.com/products/ pdu.cfm*)

APC MasterSwitch

Remote Power-off Device

The APC Remote Power-off Device (RPO) allows data center managers to turn off APC UPS output with a remote switch. When used in conjunction with an Emergency Power-Off (EPO) system, the RPO can turn off equipment in an emergency. (AP9830)

APC Remote Power-off Device



Out-of-band Management Card (AP9608)

Relay I/O Card (AP9610)

2-port Interface Expander Card (AP9607)

Environmental Monitoring Card (AP9612TH)

Temperature Humidity Probe (AP9512TH)

*(*Note: APC accessory cards are designed to work with APC UPS products that have a SmartSlot bay. The SU420NET and SU620NET products do not have a SmartSlot bay.)*

Redundant Switch for Smart-UPS

APC's Redundant Switch accessory products offer network managers a cost effective method for increasing AC power availability to network equipment

Mirrored UPS Protection

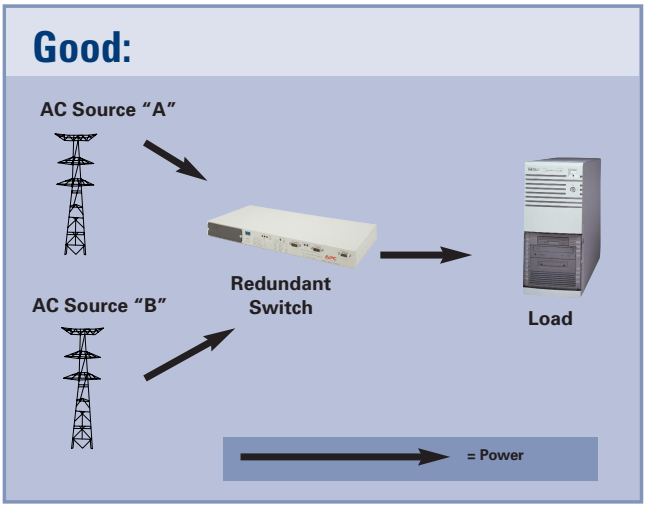
With dual input power cords, Redundant Switch has the ability to source power from one of two separate AC circuits. The Redundant Switch continuously monitors both AC circuits and will switch automatically from the primary to the redundant AC source. The transfer is seamless to the attached loads ensuring the availability of continuous AC power and safe server shutdown. Also, Redundant Switch provides user configurable settings for low voltage and AC line distortion in order to meet the variable power needs of your site.

The Redundant Switch can easily be installed in any 19" equipment rack, occupying just 1.75" or one U of rack space. Alternatively, it can be mounted in the rear or side of the rack, requiring zero U of valuable rack space. It ships with all appropriate rack mount hardware for two and four post racks.

Implementing Your Solution

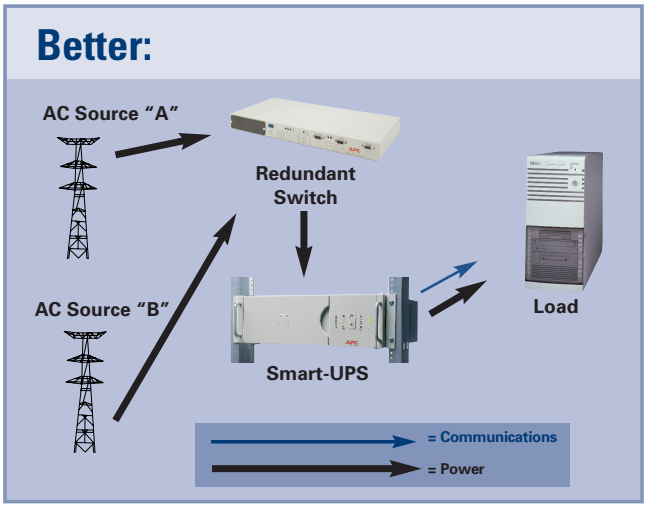
Because its design is so flexible, there are numerous configurations for Redundant Switch providing different levels of availability. Three are outlined below: Good, Better, and Best.

Good:

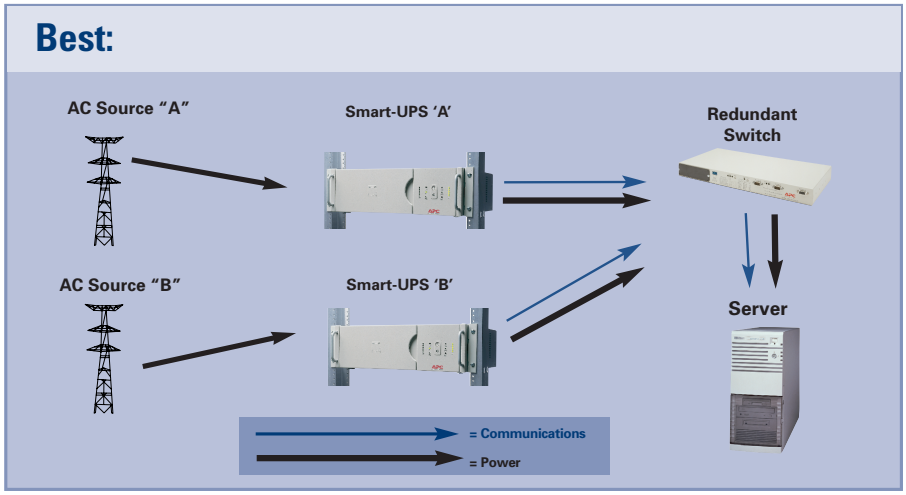


In this application, the Redundant Switch is connected to two separate AC sources. Loads with a single or multiple power cords can now have N+1 power paths in case of a single AC source failure. The AC sources can originate at a centralized UPS, a generator set, or even separate utilities. *Protection:* This application protects against failure of one of the two AC sources; these problems can range from a tripped circuit breaker to a utility blackout to a centralized UPS failure.

Better:



In this application, the Redundant Switch is connected to two separate AC sources. A single Smart-UPS is then connected to the Redundant Switch, thereby providing the Smart-UPS with dual AC input feeds. *Protection*: A Smart-UPS in the power path will provide full time surge suppression and utilize battery backup should both of the two AC sources fail. Smart-UPS protects against brownout, blackouts, and overvoltages that affect the entire distribution system. With a Smart-UPS, there is also graceful server shutdown, power monitoring, and power management.



In this application, a Redundant Switch is used with two identical Smart-UPS and PowerChute *plus*. In networking environments where redundant drives, processors, and power supplies are commonplace, mirrored power protection configuration should be a major consideration. *Protection:* Both Smart-UPS will provide continuous EMI/RFI filtering and surge suppression. Battery backup is available in case of a primary or redundant AC source failure. In case of a severe power event, the redundant Smart-UPS will continue to support the load and also provide graceful shutdown to Windows NT, Novell and Solaris based operating systems. Power monitoring and management is available with PowerChute *plus* for Windows NT, NetWare, and Solaris-based operating systems software and APC accessories. In this configuration, the Redundant Switch also has an Emergency Power Off (EPO) connector which allows the Smart-UPS to be switched off by a remotely operated EPO control. Such a configuration is common in computer rooms and laboratories where, for safety reasons, power to the loads may need to be disconnected.

Redundant Switch Configuration Table (for best application)

Redundant Switch Model	Voltage Rating	Max VA Rating	Recommended Smart-UPS[1]
SU041	120V	1400VA	(2) SU700, (2) SU1000, (2) SU1400
SU042-1[2]	120V	3000VA	(2) SU2200, (2) SU3000
SU042-2[3]	120V	3000VA	(2) SU2200, (2) SU3000
SU045-1	208V	3000VA	T models only (2) SU2200, (2) SU3000

[1] Smart-UPS should be identical tower, rack-mount, extended run or rack-mount extended models where applicable
[2]Has (2) NEMA 5-15 receptacles for load(s).
[3]Has (1) NEMA L5-30 receptacle for load(s)

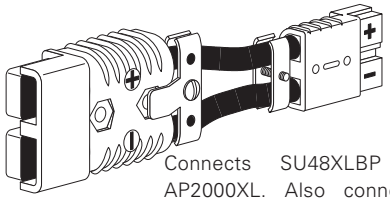
Note: Smart-UPS 2200 VA and 3000 VA units used with Redundant Switch models SU042-1 and SU042-2 require an additional backplate. For each UPS, order the appropriate backplate, as listed below:
Tower units: **SU027**
5U Rack Mount units: **SU027RM**
3U Rack Mount units: **SU027RM3U**
Because its design is so flexible, Redundant Switch has many uses. View or download the Redundant Switch Applications Guide from the Products section of APC's Web page.

Specifications	SU041	SU042-1	SU042-2	SU045-1
Acceptable input voltage	120 VAC: 0 - 165 VAC			208 VAC: 0 - 275 VAC
Output voltage (by default when used with Smart-UPS)	120 VAC: 108 - 132 VAC			208 VAC: 187 - 229 VAC
Frequency limits (on-line operation)	47 - 63 HZ			
Transfer time at normal sensitivity	6 milliseconds (typical)			
Maximum load	1400 VA; 12 A	3000 VA; 14 A		3000 VA; 24 A
Operating temperature	0 to +50 °C (+32 to +122 °F)			
Storage temperature	-15 to +50 °C (+5 to +122 °F)			
Operating and storage relative humidity	0 to 95%, non-condensing			
Operating elevation	0 to +3,000 m (0 to +10,000 ft)			
Storage elevation	0 to +15,000 m (0 to +50,000 ft)			
Electromagnetic immunity	IEC 801-2, 801-3, 801-4			
Audible noise in dBA @ 1 m (3 ft)	<45			
Size (H x W x D)	1.75 x 17.0 x 9 in.			
Weight - net (shipping)	10 (15) lb.			
Outlet configuration	(2) 5-15R	(2) 5-15R	(1) L5-30 R	(1) L6-20 R
Input Configuration	(2) 5-15P	(2) L5-30P	(2) L5-30P	(2)L6-20P
Safety approvals	Listed to UL 1778, certified to CSA 107.1			
EMC verification	120 VAC: FCC Class A certified			

Smart-UPS® Wiring Devices and Hardware Accessories

Hardware Accessories

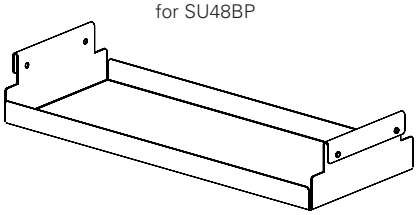
Cable Adapter **Part# SU037**



Connects SU48XLBP to AP2000XL. Also connects AP2000XLBP to SU2200XL

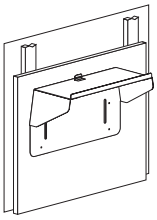
Part #SU035

Rack Mount Battery Shelf for SU48BP



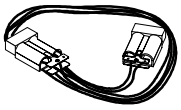
Part# SU046 SU046 Shelf Assembly

Part# SU046-6 package of six shelf Assembly Units



Each SU046 Shelf Assembly is capable of supporting a 70 lb. load. A typical installation is 3 shelves and will support approximately 200 lbs. of weight. The method of fastening the shelves to the wall, as well as the wall structure itself, must be capable of safely supporting these loads. Make sure that the installation is performed by a qualified professional.

Extension Cables



The SU039, SU039-1 and SU039-2 are four foot battery extension cables for use with APC's 24 and 48 volt battery packs. In certain applications, customers require the ability to place their batteries outside of a rack or further away from the main unit than our standard cables allow. The extension cables allow the customer the flexibility of placing the connected batteries a maximum of five feet or sixty inches away from their Smart-UPS unit.

SU039: Cable, 4 ' Extension for SU48XLBP, SU48RMXLBP, UXBP48

SU039-1: Cable, 4' Extension for SU48BP

SU039-2: Cable, 4' Extension for SU24XLBP, UXBP24

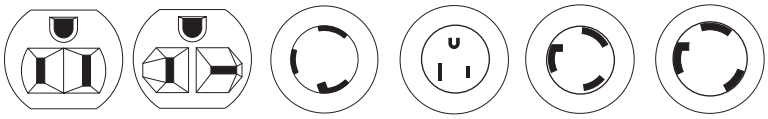
Input Plugs and Options

Choose your Input Plug carefully:

Selecting an input plug rated for fewer amps than the supplied plug will **restrict the input and output** of the UPS. The table to the left specifies the allowable choices and UPS load ratings for each input plug. If your optimal plug or receptacle configuration is not listed, please contact APC's customer service for special options.

MODEL	VOLTS	PLUG TYPE	AMPS	MAX POWER OUT
2200	120V	5-15P	15	1200VA/870W
		5-20P*	20	1600VA/1160W
		L5-30P	30	2200VA/1600W
	208V	L6-20P*	20	2200VA/1600W
2200XL	120V	5-20P	20	1300VA/950W
		L5-30P*	30	2200VA/1600W
	208V	L6-20P*	20	2200VA/1600W
3000	120V	5-20P	20	1600VA/1160W
		L5-30P*	30	2550VA/1900W
		5-50P	50	3000VA/2250W
	208V	L6-20P*	20	3000VA/2250W
5000	208V	L6-30P*	30	5000VA/3750W

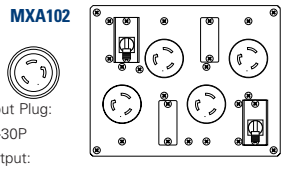
* Standard plug shipped on Smart-UPS



NEMA 5-15 120 Vac 15 Amps | NEMA 5-20 120 Vac 20 Amps | NEMA L5-30 120 Vac Locking 30 Amps | NEMA 5-50 120 Vac 50 Amps | NEMA L6-20 208 Vac Locking 20 Amps | NEMA L6-30 208 Vac Locking 30 Amps

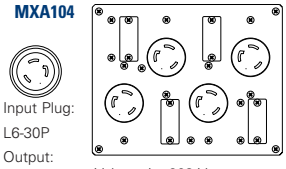
Output Options - External Power Distribution Units (PDUs) for use with all 208V models

MXA102



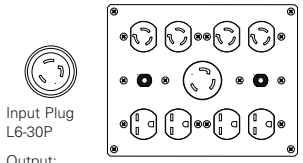
Input Plug: L6-30P
Output: 4xL6-20R
Voltage In: 208 Vac
Voltage Out: 208 Vac

MXA104



Input Plug: L6-30P
Output: 4xL6-30R
Voltage In: 208 Vac
Voltage Out: 208 Vac

MXA107



Input Plug L6-30P
Output: 4xL6-15R, 4x6-15R, 1xL6-30R
Voltage In: 208 Vac
Voltage Out: 208 Vac

Part #AP9621 APC Step-down Transformer

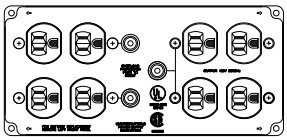
Input plug L6-30P.
Output: 12 x 5-15R
Voltage In: 208 Vac.
Voltage Out: 120 Vac

Output Options - Integrated Power Distribution Units (PDUs) for use with 120V models only

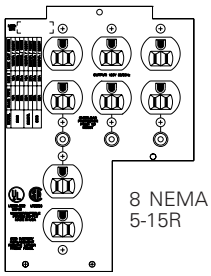
The following accessories adapt the standard output configuration to your specific needs, and are available separately.
(Product specification tables show standard input and output configurations.)

Standard output configurations

8 NEMA 5-15R



SU2200/3000 RM Units



8 NEMA 5-15R

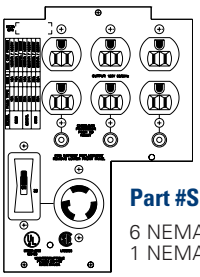
SU2200/3000 Tower Units

Hard Wire Kit Part #SU031

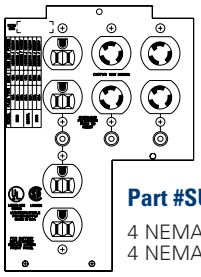
The Hard Wire Kit for 2200/3000VA provides all the necessary panels and mounting hardware and can be used to replace the outlets and/or input power cord that is originally furnished with the UPS. The input and output panels are designed with knockouts for use with standard sized cable or conduit clamps. Cable or conduit clamps are not included in this kit.

*Not for use with the SU2200RM3U or SU3000RM3U

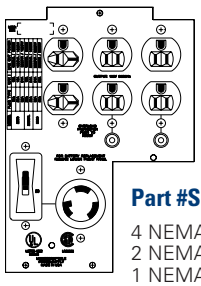
Optional Receptacle Backplates for use with Smart-UPS Tower Units (SU2200NET, SU2200XLNET, and SU3000NET)



Part #SU027
6 NEMA 5-15
1 NEMA L5-30



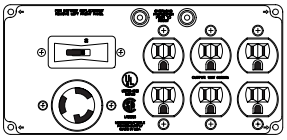
Part #SU028
4 NEMA 5-15
4 NEMA L5-15



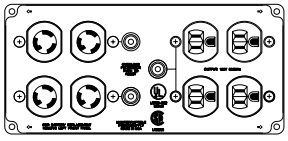
Part #SU029
4 NEMA 5-15
2 NEMA 5-20
1 NEMA L5-20

Optional Receptacle Backplates for use with Smart-UPS 5U Rack-mount Units (SU2200RMXLNET and SU3000RMNET)

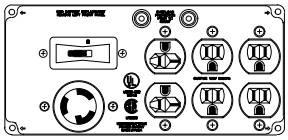
Part #SU027RM 6 NEMA 5-15
1 NEMA L5-30



Part #SU028RM 4 NEMA 5-15
4 NEMA L5-15

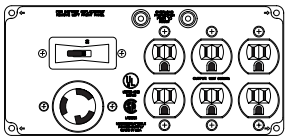


Part #SU029RM 4 NEMA 5-15
2 NEMA 5-20
1 NEMA L5-20

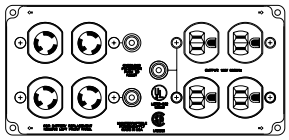


Optional Receptacle Backplates for use with Smart-UPS 3U Rack-mount Units (SU2200RM3U and SU3000RM3U)

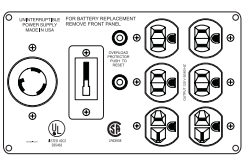
Part #SU027RM3U 6 NEMA 5-15
1 NEMA L5-30



Part #SU028RM3U 4 NEMA 5-15
4 NEMA L5-15



Part #SU029RM3U 4 NEMA 5-15
2 NEMA 5-20
1 NEMA L5-20



Global Service Programs

Quick-start plan

Highest level of service combines **Start-up Service** and next business day **On-site support service**

- 7 x 24 telephone technical support with 1 hour response
- 1 or 3 year warranty extension

Start-up service

- APC-certified quality engineer verifies proper wiring of APC hardware
- Start up unit and perform comprehensive diagnostic and self-tests
- Attach appropriate loads to your APC UPS
- Includes all parts, labor, and travel expenses
- Train your support staff on the proper use of the unit

On-site support service

- Next business day on-site repair service
- **Power Plan extended warranty** (1 or 3 years)
- Includes all parts, internal batteries (delivered next business day) labor and travel expenses
- 7 x 24 telephone technical support with 1 hour response

Power Plan extended warranty

- Extends product's standard warranty by 1 or 3 years
- All parts and internal batteries are covered, all delivered to your site by next business day
- Shipping to and from APC, paid by APC
- 7 x 24 telephone technical support with 1 hour response

All service program pricing levels are based on product "T" level - please refer to product specification pages for the correct "T" level of your product. Your APC representative can provide comprehensive pricing and program specifications. For more information, visit *www.apcc.com/support* to access the Service Configurator and more program specifics.

Awards

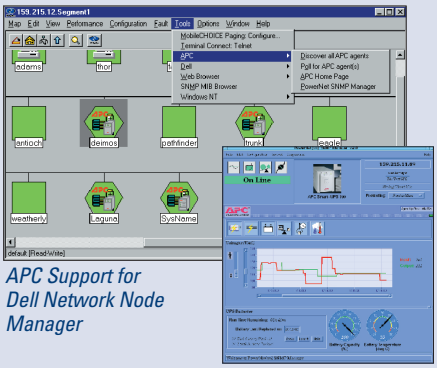
Award	Publication	Year
Best Buy	Computer Shopper	1999
Best Buy (SU1000)	PC World (Brazil)	1999
Best Buy (SU2000)	Network Solutions (UK and Korea)	1999
Editor's Choice (SU1000)	Windows NT Magazine (Australia)	1999
Promising Product in 1999	Computer World (Korea)	1999
Recommended Storage Area Networks Server Applications	Decision Micro (France)	1999
Best product of 1998	PC World	1998
Best Security Hardware	SC Info Security Magazine	1998
Editor's Choice	LAN Times	1998
Editor's Choice	Computerworld (Korea)	1998
Editor's Choice	Decision Micro et Reseaux (France)	1998
Editor's Choice Award	Computer and Network	1998
Editor's Choice	Computer Network (Korea)	1998
Editor's Chioce	Computer Reseller News	1998
Products of the Year - Power Protection Category	Networking Solutions	1998
Recommended (SU2200RM)	Reseaux France	1999
Top 100 products (SU2000)	VAR Business	1998
VAR Business Recommends (SU2000)	VAR Business	1998

Bring power management to your server management console

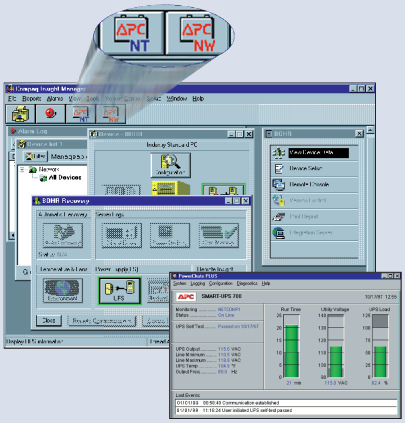
Reliable power management is critical to server availability. Today, UPS protection is more than just an insurance policy, it is an integral component of any network. Keeping this in mind, APC developed PowerChute *plus* to enhance the management of server UPSs directly from four major server management consoles.

Plug-ins are additional pieces of software that enhance the functionality of PowerChute plus. Advanced software allow you to customize PowerChute plus to meet the needs of and integrate with several powerful programs.

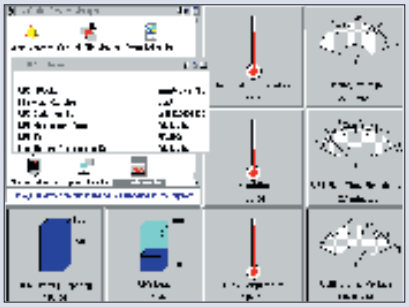
Network administrators simply don't have time to use four or five different tools to perform a single task, so APC PowerChute plus ensures complete integration of key UPS/power information with many server management packages. Users can quickly and easily determine UPS status, configure parameters, and even perform shutdown and reboot – all from within their server management consoles.(Features vary by server management package)



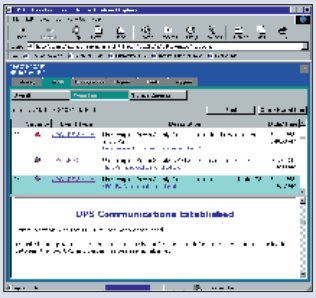
APC Support for Dell Network Node Manager



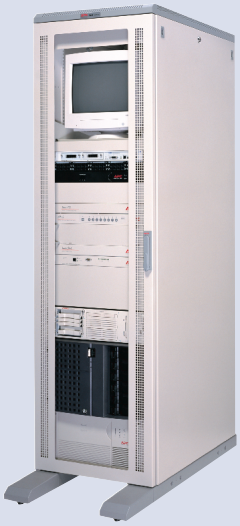
APC Support for Compaq Insight Manager



APC Support for IBM Netfinity Manager



APC Support for HP TopTools



AR1200A — SU1400RMNET pre-installed in 42U NetShelter
AR1205A — SU2200RM3U pre-installed 42U NetShelter
AR1210A — SU3000RM3U pre-installed in 42U NetShelter
AR1215A — SU5000RMT5U pre-installed in 42U NetShelter

NetShelter® and Smart-UPS offer Power-Protected Enclosure Bundles for pre-installed power protection

Protecting today's network environment from power and environmental variables is essential to ensuring high system availability. APCs NetShelter and Smart-UPS pre-assembled and pre-configured Power-Protected Enclosure Bundles will help streamline the installation efforts while bundling the ultimate in high availability protection for the network. This turnkey solution, designed with both APC's channel partners and MIS managers in mind, is a simple, yet flexible, bundle that enhances rack servers and internetworking equipment at a price significantly less than similar industry solutions.

The NetShelter enclosure is a high-quality, free-standing cabinet that saves floor space, organizes your equipment, eliminates cabling "rat's nests", and physically protects your investment. NetShelter 42U (AR1000A) provides 73.5\'94 of vertical space for industry-standard 19 inch rack-mounted equipment.

The APC rack-mount Bundles combine rack-mount Smart-UPS (1400VA, 2200VA, 3000VA and 5000VA) units within the NetShelter 42U enclosure completely pre-configured and pre-installed. This saves a significant amount of configuration time (as much as 1 hour), resources and money. APC customers will have the convenience of ordering any one of the four bundles with one part number. Inside delivery of the bundle at no extra charge is included if an APC recommended carrier is requested at order entry.

APC's quality system is certified by ISO 9002 standards

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Visit: *www.apcc.com*
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Web Support: support.apcc.com
PowerFax™: 800 347 FAXX

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